Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A transceiver ~~(3a, 3b, 3c, 3d, and 3e)~~ comprising:

a transmitting and receiving electrode [[(105)]] that induces an electric field in an electric field transmission medium [[(100)]], and receives the electric field induced in said electric field transmission medium [[(100)]];

a transceiver main body [[(30)]] that generates said electric field based on information to be transmitted in said transmitting and receiving electrode [[(105)]], and converts said electric field generated in said transmitting and receiving electrode [[(105)]] into reception information, thereby transmitting and receiving information via said electric field transmission medium [[(100)]];

a first structure [[(107)]] that is interposed between said transmitting and receiving electrode [[(105)]] and said electric field transmission medium [[(100)]];

a second structure [[(7a and 99a)]] that is interposed between said transceiver main body [[(30)]] and said electric field transmission medium [[(100)]];

a battery [[(6)]] that drives said transceiver main body [[(30)]]; and

a third structure [[(7b and 99b)]] that is interposed between said transceiver main body [[(30)]] and said battery [[(6)]], wherein

each of said first, said second, and said third structures is composed of at least one of metal, a semiconductor, and an insulator, and is equivalent as a parallel circuit of a resistor and a capacitor.

2. (Currently Amended) The transceiver ~~(3a, 3b, 3c, 3d, and 3e)~~ according to claim 1, wherein the impedance of said second structure ~~(7a and 99a)~~ and the impedance of said third structure ~~(7b and 99b)~~ are larger than the impedance of said first structure [[(107)]].

3. (Currently Amended) The transceiver ~~(3a, 3b, 3c, 3d, and 3e)~~ according to claim 2, wherein said first structure [[(107)]] is an insulating film that covers said transmitting and receiving electrode [[(105)]] against said electric field transmission medium [[(100)]].

4. (Currently Amended) The transceiver ~~(3a, 3b, 3c, 3d, and 3e)~~ according to claim 2, wherein said second structure ~~(7a and 99a)~~ and said third structure ~~(7b and 99b)~~ are insulating members.

5. (Currently Amended) A transceiver ~~(3a, 3b, 3c, 3d, and 3e)~~ comprising:

a transceiver main body [[(30)]] that induces an electric field based on information to be transmitted in an electric field transmission medium [[(100)]] from a transmitting electrode [[(105 and 105a)]], thereby transmitting the information via said electric field transmission medium [[(100)]];

a battery [[(6)]] that drives said transceiver main body [[(30)]]; and

an insulating case [[(33)]] that incorporates said transceiver main body [[(30)]], wherein

said transmitting electrode [[(105 and 105a)]] is provided on the whole surface of a portion of an external wall surface of said insulating case [[(33)]], said electric field transmission medium [[(100)]] closely approaching the portion, and is covered with an insulating film [[(107 and 107a)]] so as not to be in direct contact with said electric field transmission medium [[(100)]].

6. (Currently Amended) The transceiver ~~(3a, 3b, 3c, 3d, and 3e)~~ according to claim 5, further comprising an insulating member ~~(7b and 99b)~~ between said battery [[(6)]] and said transceiver main body [[(30)]].

7. (Currently Amended) The transceiver ~~(3a, 3c, 3d, and 3e)~~ according to claim 6, wherein said insulating member is a foam member [[(7b)]] containing air.

8. (Currently Amended) The transceiver [[(3b)]] according to claim 6, wherein said insulating member is a plurality of wooden pillars [[(99b)]].

9. (Original) The transceiver according to claim 6, wherein said insulating member is a cushion member having predetermined gas confined therein.

10. (Currently Amended) The transceiver ~~(3a, 3b, 3c, 3d, and 3e)~~ according to claim 5, further comprising a ground electrode ~~(131, 161, and 163)~~ that defines a reference voltage which is necessary to drive said transceiver main body [[(30)]], and that is attached to an internal wall surface of said insulating case [[(33)]].

11. (Currently Amended) The transceiver ~~(3c and 3d)~~ according to claim 5, further comprising a ground electrode ~~(131, 161, and 163)~~ that defines a reference voltage which is necessary to drive said transceiver main body [[(30)]], and that is attached to an external device at the outside of said insulating case [[(33)]].

12. (Currently Amended) A transceiver [[(3e)]] comprising:

a transceiver main body [[(30)]] that induces an electric field based on information to be transmitted in an electric field transmission medium [[(100)]] from a transmitting electrode [[(105a)]], and receives information based on the electric field induced in said electric field transmission medium [[(100)]] with a receiving electrode [[(105b)]], thereby transmitting and receiving the information via said electric field transmission medium [[(100)]];

a battery [[(6)]] that drives said transceiver main body [[(30)]]; and

an insulating case [[(33)]] that incorporates said transceiver main body [[(30)]], wherein

said transmitting electrode [[(105a)]] is provided on the whole surface of a portion of an external wall surface of said insulating case [[(33)]], said electric field transmission medium [[(100)]] closely approaching the portion, and is covered with a first insulating film

[[(107a)]] so as not to be in direct contact with said electric field transmission medium [[(100)]], and

said receiving electrode [[(105b)]] is provided on an external wall surface of said first insulating film [[(107a)]], and is covered with a second insulating film [[(107b)]] so as not to be in direct contact with said electric field transmission medium [[(100)]].

13. (Currently Amended) A transceiver [[(3f)]] comprising:

a transceiver main body [[(30)]] that induces an electric field based on information to be transmitted in an electric field transmission medium [[(100)]] from a transmitting electrode [[(105a)]], and receives information based on the electric field induced in said electric field transmission medium [[(100)]] with a receiving electrode [[(105b)]], thereby transmitting and receiving the information via said electric field transmission medium [[(100)]];

a battery [[(6)]] that drives said transceiver main body [[(30)]]; and

an insulating case [[(33)]] that incorporates said transceiver main body [[(30)]], wherein

said receiving electrode [[(105b)]] is provided on the whole surface of a portion of an external wall surface of said insulating case [[(33)]], said electric field transmission medium [[(100)]] closely approaching the portion, and is covered with a first insulating film [[(107a)]] so as not to be in direct contact with said electric field transmission medium [[(100)]], and

said transmitting electrode [[(105a)]] is provided on an external wall surface of said first insulating film [[(107a)]], and is covered with a second insulating film [[(107b)]] so as not to be in direct contact with said electric field transmission medium [[(100)]].

14. (Currently Amended) A transceiver [[(3)]] that receives information based on an electric field induced in an electric field transmission medium [[(100)]], thereby receiving the information via said electric field transmission medium [[(100)]], said transceiver [[(3)]] comprising:

memory means [[(17)]] for storing information based on two electric signals and positional information determined according to the electric signal information, by relating these pieces of information to each other;

electric field detecting means [[(115)]] for detecting an electric field transmitted after being induced in said electric field transmission medium [[(100)]], and converting a change of said electric field into an electric signal;

a band pass filter [[(11a and 11b)]] that passes only a signal component having a predetermined band containing said two electric signals out of electric signals obtained by said electric field detecting means [[(115)]]; and

position conversion processing means [[(15)]] for referring to said memory means [[(17)]] and obtaining positional information corresponding to the information based on said two electric signals that pass said band pass filter.

15. (Currently Amended) The transceiver [[(3)]] according to claim 14, wherein

said memory means [[(17)]] stores information based on signal intensity of two electric signals and positional information determined according to the signal intensity information, by relating these pieces of information to each other,

said band pass filter [[(11a and 11b)]] includes:

a first band pass filter [[(11a)]] that passes only a signal component having a first band containing one of said electric signals obtained by said electric field detecting means [[(115)]]; and

a second band pass filter [[(11b)]] that passes only a signal component having a second band different from said first band containing the other of said electric signals obtained by said electric field detecting means [[(115)]],

said transceiver [[(3)]] further comprising signal intensity measuring means ~~(13a and 13b)~~ for measuring signal intensity of a signal component which passes through said first band pass filter [[(11a)]] and signal intensity of a signal component which passes through said second band pass filter [[(11b)]], wherein

said position conversion processing means [[(15)]] refers to said memory means

[[(17)]] and obtains positional information corresponding to the information based on signal intensity of a signal component which passes through said first band pass filter and signal intensity of a signal component which passes through said second band pass filter measured by said signal intensity measuring means ~~(13a and 13b)~~.

16. (Currently Amended) The transceiver [[(3)]] according to claim 15, wherein

said memory means [[(17)]] stores information of an intensity difference between electric signals and positional information determined according to the intensity difference information, by relating these pieces of information to each other, and

said position conversion processing means [[(15)]] calculates a difference between intensity of the signal component which passes through said first band pass filter and intensity of the signal component which passes through said second band pass filter measured by said signal intensity measuring means ~~(13a and 13b)~~, refers to said memory means [[(17)]], and obtains the positional information corresponding to the intensity difference.

17. (Currently Amended) The transceiver [[(3)]] according to claim 16, wherein an external device can rewrite the relation between the information of the intensity difference and the positional information stored in said memory means [[(17)]].

18. (Currently Amended) The transceiver [[(3)]] according to claim 15, wherein

said memory means [[(17)]] stores information of an intensity ratio between electric signals and positional information determined according to the intensity ratio information, by relating these pieces of information to each other, and

said position conversion processing means [[(15)]] calculates a ratio of intensity of the signal component which passes through said first band pass filter to intensity of the signal component which passes through said second band pass filter measured by said signal intensity measuring means ~~(13a and 13b)~~, refers to said memory means [[(17)]], and obtains the positional information corresponding to the intensity ratio.

19. (Currently Amended) The transceiver [[(3)]] according to claim 18, wherein an external device can rewrite the relation between the information of the intensity ratio and the positional information stored in said memory means [[(17)]].

20. (Currently Amended) The transceiver [[(3)]] according to claim 14, wherein

said memory means [[(17)]] stores information based on a phase difference between two electric signals and positional information determined according to the phase difference information, by relating these pieces of information to each other,

said band pass filter ~~(11a and 11b)~~ includes:

a first band pass filter [[(11a)]] that passes only a signal component having a first band containing one of said electric signals obtained by said electric field detecting means [[(115)]]; and

a second band pass filter [[(11b)]] that passes only a signal component having a second band different from said first band containing the other of said electric signals obtained by said electric field detecting means [[(115)]],

the transceiver [[(3)]] further comprising phase detecting means ~~(23a and 23b)~~ for detecting a phase of the signal component which passes through said first band pass filter [[(11a)]] and a phase of the signal component which passes through said second band pass filter [[(11b)]], wherein

said position conversion processing means [[(25)]] calculates a difference between the phase of the signal component which passes through said first band pass filter and the phase of the signal component which passes through said second band pass filter detected by said phase detecting means ~~(23a and 23b)~~, refers to said memory means [[(17)]], and obtains the positional information corresponding to the phase difference.

21. (Currently Amended) The transceiver [[(3)]] according to claim 20, wherein an external device can rewrite the relation between the information of the phase difference and the positional information stored in said memory means [[(17)]].

22. (Currently Amended) A positional information obtaining system comprising:

an electric field transmission sheet [[(302a)]] that transmits an electric charge and has any point thereon contacted by an electric field transmission medium [[(100)]];

a first and a second signal generators ~~(A and B)~~ that are disposed respectively at different positions on said electric field transmission sheet [[(302a)]], and induce electric fields based on electric signals having a first band and a second band respectively on said electric field transmission sheet [[(302a)]]; and

a transceiver [[(3)]] that receives information based on an electric field induced in said electric field transmission medium [[(100)]], thereby receiving the information via said electric field transmission medium [[(100)]], wherein

said transceiver [[(3)]] includes:

memory means [[(17)]] for storing information based on two electric signals and positional information determined according to the electric signal information, by relating these pieces of information to each other;

electric field detecting means [[(115)]] for detecting an electric field transmitted after being induced in said electric field transmission medium [[(100)]], and converting a change of said electric field into an electric signal;

a band pass filter ~~(11a and 11b)~~ that passes only a signal component having a predetermined band containing said two electric signals out of electric signals obtained by said electric field detecting means [[(115)]]; and

position conversion processing means [[(15)]] for referring to said memory means [[(17)]] and obtaining the positional information corresponding to the information based on said two electric signals that pass said band pass filter.

23. (Currently Amended) An information input system comprising:

an electric field transmission sheet [[(302a)]] that transmits an electric charge and has any point thereon contacted by an electric field transmission medium [[(100)]];

a first and a second signal generators [[(A and B)]] that are disposed respectively at

different positions on said electric field transmission sheet [[(302a)]], and induce electric fields based on electric signals having a first band and a second band respectively on said electric field transmission sheet [[(302a)]];

a transceiver [[(3)]] that receives information based on an electric field induced in said electric field transmission medium [[(100)]], thereby receiving the information via said electric field transmission medium [[(100)]],

said transceiver [[(3)]] including:

memory means [[(17)]] for storing information based on two electric signals and positional information determined according to the electric signal information, by relating these pieces of information to each other;

electric field detecting means [[(115)]] for detecting an electric field transmitted after being induced in said electric field transmission medium [[(100)]], and converting a change of said electric field into an electric signal;

a band pass filter ~~(11a and 11b)~~ that passes only a signal component having a predetermined band containing said two electric signals out of electric signals obtained by said electric field detecting means [[(115)]]; and

position conversion processing means [[(15)]] for referring to said memory means [[(17)]] and obtaining the positional information corresponding to the information based on said two electric signals that pass said band pass filter; and

a wearable computer [[(1)]] that has computer memory means for storing positional information and input information corresponding to the positional information by relating these pieces of information to each other, refers to said computer memory means based on the positional information input from said transceiver [[(3)]], and obtains the input information.

24. (Withdrawn) An information input system comprising:

electric field inducing means that is contacted or operated by an electric field transmission medium (100), and induces an electric field in said electric field transmission medium (100) according to a physical quantity based on the contact or operation;

a transceiver that receives the electric field induced in said electric field transmission medium (100), applies the electric field to a polarization modulator or an optical intensity modulator, polarization-modulates or optical intensity-modulates laser light according to the electric field, converts the polarization-modulated or optical intensity-modulated laser light into an electric signal, extracts an electric signal having a frequency component concerning a physical quantity based on said contact or operation from the converted electric signals, and outputs the electric signal concerning the physical quantity based on said contact or operation; and

information processing means for inputting therein the electric signal concerning the physical quantity based on said contact or operation from said transceiver, and obtaining information corresponding to the physical quantity based on said contact or operation by said electric field transmission medium (100).

25. (Withdrawn) An electric field sensor device (115a, 115b, 115c, 115d, and 115e) that modulates optical intensity of laser light based on an electric field to be detected, thereby detecting said electric field, said electric field sensor device having an electric field sensor unit (110a and 110b) and a light receiving circuit (152a, 152b, 152c, and 152d), wherein

said electric field sensor unit (115a, 115b, 115c, 115d, and 115e) includes:

laser light emitting means (121);

branching means (139) for branching a laser light emitted from said laser light emitting means (121) into a first laser light and a second laser light that are different from each other; and

optical intensity modulating means (124) with which said electric field to be detected is coupled, that modulates the optical intensity of said first laser light based on said coupled electric field, and

said light receiving circuit (152a, 152b, 152c, and 152d) includes:

first light/voltage converting means (143a, 147a, 147A, 145a, and 145A) for converting the optical intensity of said first laser light modulated by said optical intensity modulating means (124) into a voltage signal;

second light/voltage converting means (143b, 147b, 147B, 145b, and 145B) for converting the optical intensity of said second laser light branched by said branching means (139) into a voltage signal; and

differential amplifying means (112) for differentially amplifying the voltage signal obtained by conversion by said first light/voltage converting means (143a, 147a, 147A, 145a, and 145A) and the voltage signal obtained by conversion by said second light/voltage converting means (143b, 147b, 147B, 145b, and 145B).

26. (Withdrawn) The electric field sensor device (115b) according to claim 25, wherein said electric field sensor unit (110b) further includes an optical variable attenuator (134B) that attenuates the optical intensity of said second laser light obtained by branching by said branching means (139), and said second photoelectrical converting means (143b) inputs said second laser light attenuated by said optical variable attenuator (134B).

27. (Withdrawn) The electric field sensor device (115b) according to claim 25, wherein said electric field sensor unit (110b) further includes a first optical variable attenuator (134A) that attenuates the optical intensity of said first laser light obtained by branching by said branching means (139) at a predetermined rate, and a second optical variable attenuator (134B) that attenuates the optical intensity of said second laser light obtained by branching by said branching means (139) at a rate higher than an attenuation rate of said first optical variable attenuator, said optical intensity modulating means (124) inputs therein said first laser light attenuated by said first optical variable attenuator (134A), and said second photoelectrical converting means (143b) inputs therein said second laser light attenuated by said second optical variable attenuator (134B).

28. (Withdrawn) The electric field sensor device (115a, 115b, 115c, 115d, and 115e) according to claim 25, wherein

said first light/voltage converting means (143a, 147a, 147A, 145a, and 145A) includes:

first light/current converting means (143a) for converting the optical intensity of said first laser light modulated by said optical intensity modulating means (124) into a current signal;

a first voltage source (147a and 147A) that applies an inverse bias voltage to said first light/current converting means (143a); and

a first load resistor (145a and 145A) that converts said current signal obtained by conversion by said first light/current converting means (143a) into a voltage signal, and

said second light/voltage converting means (143b, 147b, 147B, 145b, and 145B) includes:

second light/current converting means (143b) for converting the intensity of said second laser light obtained by branching by said branching means (139) into a current signal;

a second voltage source (147b and 147B) that applies an inverse bias voltage to said second light/current converting means (143b); and

a second load resistor (145b and 145B) that converts said current signal obtained by conversion by said second light/current converting means (143b) into a voltage signal.

29. (Withdrawn) The electric field sensor device (115c) according to claim 28, wherein at least one of said first load resistor and said second load resistor is a variable resistor (145A and 145B).

30. (Withdrawn) The electric field sensor device (115d) according to claim 28, wherein at least one of said first voltage source and said second voltage source is a variable voltage source (147A and 147B).

31. (Withdrawn) The electric field sensor device (115e) according to claim 25, wherein said light receiving circuit (152d) further includes amplifying means (149A and 149B) for amplifying at least one of the voltage signal obtained by conversion by said first light/voltage

converting means (143a, 147a, 147A, 145a, and 145A) and the voltage signal obtained by conversion by said second light/voltage converting means (143b, 147b, 147B, 145b, and 145B).

32. (Withdrawn) A transceiver that receives information based on an electric field induced in an electric field transmission medium (100), thereby receiving the information via said electric field transmission medium (100), said transceiver comprising:

said electric field sensor device (115 and 215) according to claim 25;

a signal processing circuit (116) that at least removes a noise from a voltage signal output from said electric field sensor device (115 and 215);

noise detecting means (218) for detecting quantity of a noise component of the voltage signal output from said signal processing circuit (116); and

a control signal generator (219) that generates a control signal to variably control a variable value of said electric field sensor unit (110) or said light receiving circuit (152) based on the detection data output from said noise detecting means (218).